ABSTRACT

A packaging cell line capable of complementing recombinant adenoviruses based on serotypes from subgroup B, preferably adenovirus type 35. The cell line is preferably derived from primary, diploid human cells (e.g., primary human retinoblasts, primary human embryonic kidney cells and primary human amniocytes) which are transformed by adenovirus E1 sequences either operatively linked on one DNA molecule or located on two separate DNA molecules, the sequences being operatively linked to regulatory sequences enabling transcription and translation of encoded proteins. Also disclosed is a cell line derived from PER.C6 (ECACC deposit number 96022940), which cell expresses functional Ad35 E1B sequences. The Ad35-E1B sequences are driven by the E1B promoter or a heterologous promoter and terminated by a heterologous poly-adenylation signal. The new cell lines are useful for producing recombinant adenoviruses designed for gene therapy and vaccination. The cell lines can also be used for producing human recombinant therapeutic proteins such as human growth factors and human antibodies. In addition, the cell lines are useful for producing human viruses other than adenovirus such as influenza virus, herpes simplex virus, rotavirus, measles virus.